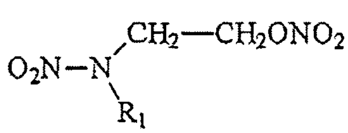
IN THE CLAIMS:

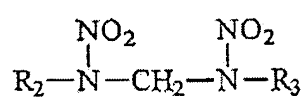
Claims 1-13 (canceled).

14. (Previously presented) High energetic material with layered grain structure, comprising a green powder which is unprocessed nitrocellulose powder and into which is introduced a high energy plasticizer and a polymeric deterrent,

wherein_the high-energy plasticizer has the structure I or II, wherein_ $R_1 = C_1\text{-}C_{10}$-alkyl, $C_1\text{-}C_{10}$-alkoxy or aryl, R_2 and R_3 independently of each other is $C_1\text{-}C_5$-alkyl or $C_1\text{-}C_5$ alkoxy and is used in amounts of 5-20% relative to the green powder[[.]]:



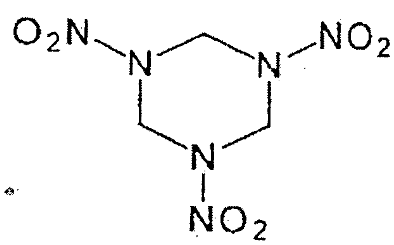
(I)



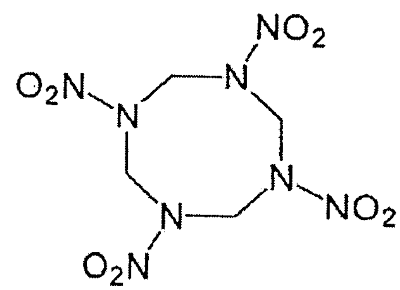
(II)

:

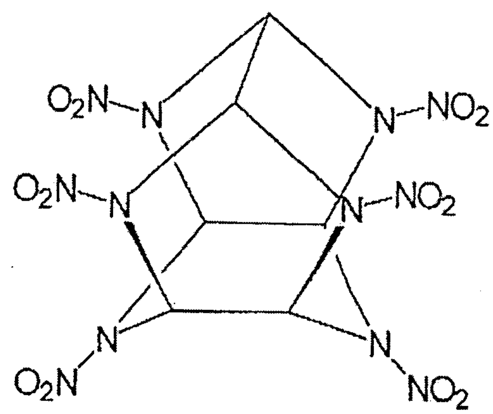
15. (Previously presented) A high-energetic material according to claim 14, characterized in that the green powder is produced by extruding a solvent-containing dough of nitrocellulose, wherein the solvent-containing dough contains at least one compound of the structures IV, V, or VI, which at least one compound comprises 10-60% of the dough (on a dry basis) wherein the formula of structures IV, V or VI are as follows:



(IV)



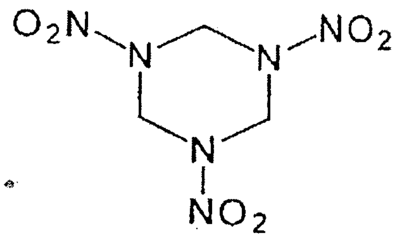
(V)



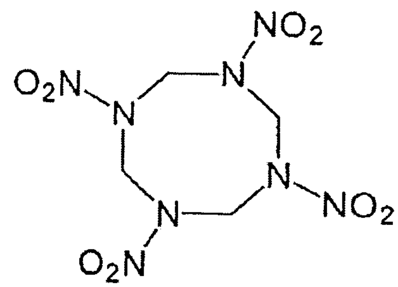
(VI)

16. (Previously presented) A green grain for producing a functional high-energetic material with layered grain structure, containing a high-energy plasticizer and a polymeric deterrent, wherein the green grain is formed by extruding a solvent-containing dough of nitrocellulose, characterized in that the solvent containing dough comprises at

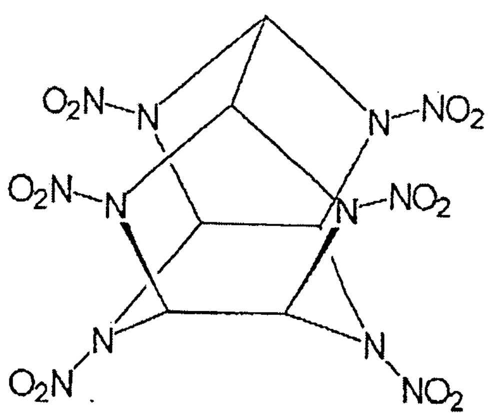
least one compound with the structure IV, V or VI and which comprise 10-60 % of the dough (dry basis)



(IV)



(V)



(VI)

17. (Previously presented) A propellant powder comprising a high-energetic material in accordance with claim 14.

18. (Previously presented) Ammunition comprising a propellant powder according to claim 17.

19. (Previously presented) A method for producing a functional, high-energetic material having a layered grain structure and containing an energetic plasticizing agent and a polymeric desensitizing agent, comprising the steps of:

a) providing an energetic plasticizing agent in the form of a solution or in the form of an emulsion comprising water;

b) providing a polymeric desensitizing agent in the form of a solution or in the form of an emulsion comprising water;

c) providing a receptive grain which will absorb an emulsion,

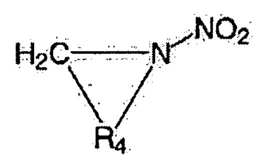
d) diffusing at least one emulsion comprising said energetic plasticizing agent or said polymeric desensitizing agent into the receptive grain to produce the layered grain structure.

20. (Previously Presented) A method according to claim 19, wherein the receptive grain comprises at least 80% nitrocellulose with a nitrogen content of 11-13.5%.

21. (Previously Presented) A method according to claim 19, wherein the receptive grain has a cylindrical structure with a diameter to length ratio of between 0.5 and 2.0, an outside diameter between 0.5 and 10 mm and contains at least one hole.

22. (Previously Presented) A method according to claim 21, wherein said at least one hole has a hole diameter between 0.03 and 0.7 mm.

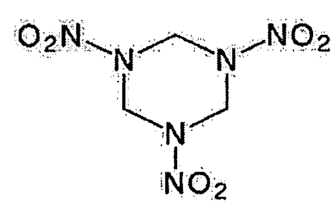
23. (Previously Presented) A method according to claim 19, which further comprises producing the receptive grain by compressing a solvent-containing powder dough of nitrocellulose in a molding press or by extruding it, wherein the solvent-containing powder dough contains at least one substance with the general structure



(III)

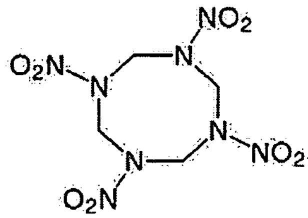
wherein $R_4 = (-CH_2-N-NO_2)_n$ and n = 2 or 3, wherein said at least one substance is present in an amount of 5-80% based on a dry weight of the powder dough.

24. (Previously Presented) A method according to claim 23, wherein said at least one substance has a structure selected from the group consisting IV, V and VI , wherein IV is



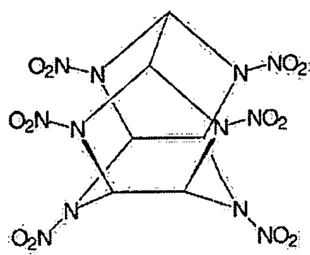
(IV) ;

wherein V is



(V) ;

and wherein VI is



(VI)

and wherein the said at least one substance is present in the absorbent grain in an amount which is between 10-60%.

25. (Previously Presented) A method according to claim 19, wherein a diffusion depth of at least one of said energetic plasticizing agent or said polymeric desensitizing agent in the receptive grain is in the range of 100-500 μm.

26. (Previously Presented) A method according to claim 19, further comprising the steps of:

a) adding the high-energy plasticizing agent in an organic solvent to a mixture of receptive grains in water;

b) admixing the desensitizing agent in water.

27. (Previously Presented) A method according to claim 26, wherein the adding of the high-energy plasticizing agent and the admixing of the desensitizing agent in water is undertaken at a temperature between 20-85°C.

28. (Previously Presented) A method according to claim 27, further comprising

a) pre-soaking receptive grains in an organic solvent in a reactor;

b) stirring during a period of 4-24 hours at a temperature of 20-85°C prior to adding the solution or emulsion of high-energy plasticizing agent, which is liquid at room temperature.

29. (Previously Presented) A method according to claim 26, wherein the receptive grains are placed into 1 to 5 times the amount by weight of water.

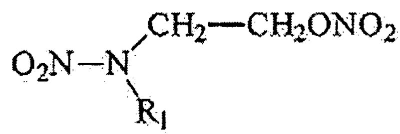
30. (Previously Presented) A method according to claim 26, which is conducted in a reactor tank, wherein after the step of admixing the desensitizing agent,

a) the pressure in the reactor tank is reduced to 400-800 mbar during a period of 2-6 hours to allow liquid components to drain out through a strainer in a bottom of the reactor tank and

b) a resulting powder mass is dried with warm air.

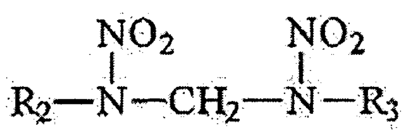
31. (Previously Presented) A method according to claim 30, wherein, after drying the resulting powder mass, 0.01-2% graphite is added in a polishing drum to the powder mass to obtain a bulk propellant powder with a bulk density > 1000 g/l.

32. (Previously Presented) A method according to claim 19, wherein the high-energy plasticizing agent is selected from the group consisting of nitroglycerine, diethylene glycol dinitrate, a substance with the structure



(I)

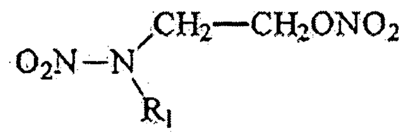
and a substance with the structure



(II)

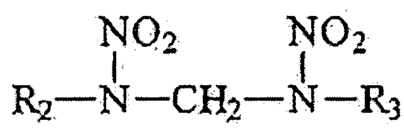
wherein $R_1 = C_1$-C_{10}-alkyl, C_1-C_{10}-alkoxy or aryl, R_2 and R_3 independent of each other C_1-C_5-alkyl or C_1-C_5-alkoxy and wherein the energizing plasticizing agent is used in amounts of 5-20% relative to the receptive grains.

33. (Previously Presented) A method according to claim 32, characterized in that the high-energy plasticizing agent is selected from the group consisting of the structure.



(I)

and



(II)

with $R_1 = C_1$-C_4 alkyl, methyl, ethyl, n-propyl, i-propyl, n-butyl, i-butyl, or t-butyl, and with R_2 and R_3 independent of each other being C_1-C_2 (alkyl).

34. (Previously Presented) A method according to claim 1, characterized in that the polymeric desensitizing agent is an organic ether or ester compound with a molecular weight of between 100-100,000.

35. (Previously Presented) The method of Claim 33, wherein each of R_2 and R_3 is independently methyl or ethyl.

36. (Previously Presented) The method of Claim 33, wherein R_1 is alkyl, methyl, ethyl, n-propyl, i-propyl, n-butyl, i-butyl, or t-butyl.

37. (Previously Presented) The method of Claim 35 wherein R R_1 is alkyl, methyl, ethyl, n-propyl, i-propyl, n-butyl, i-butyl, or t-butyl.--